

LONG ISLAND GROUP

Sinclair

TIME

8/84

ITEM	PAGE
I. MEETING NOTES	1
II. ENLARGED CHARACTER MODES 2068 by Jeff Street	2
III. A WHALE OF AN IDEA - USING TS 2068 IN BUSINESS - by Harvey Rait	4
IV. ZX/PROFILE IMPROVEMENT by Kevin Smith	4
V. Unplotting on the 2068 by Jeff Street	5
VI. CATALOG /SOFTWARE RECEIVED	6

MEETING NOTES

Our last meeting was held on July 7th at Heinz H's place. Agenda was a little loose, but here is what we did:

1. Harvey R. demoed some of the attention getting displays he's developed for use in his business (see Listing, P-4).
2. Kevin Smith showed us his Panasonic "Data" recorder. These sell for \$40. at DOA and provide a counter, automatic tone control ("data" setting) and phase reversal switch. A very well priced machine.
3. Heinz had set up his "shaper" (preliminary schematic published previously) which really shapes up the TS 1000's waveforms. Coming out of the "shaper", they all looked text-book perfect. We'll have more details on this device in a latter issue.
4. Bob M. brought along his Westridge Modem and we called the LICA bulletin board. We left a message for Al Levy to call us and browsed around a bit. This BBS is a big one and seems quite well run. We tried a few other BBS's with mixed-to-poor results. The Modem hardware seems excellent (auto dial is a nice feature), but good software just isn't here yet.
5. I tried "Firstloader" several times and we got a full run through, but apparently picked up some garbage along the way. At any rate, a working copy of FirstLoadr was included on the Library Tape #1.
6. Library tape #1 was distributed. It includes several public domain games (from U.K. magazines), FIRSTLOADR, my memory list program (used to crack Transylvania Tower), Jeff S's big character and uplot routines and some graphics demo programs. Bring a blank tape (and your recorder) to the next meeting if you want a copy.

Nazir P. was not at the meeting, but he has produced a simple word processor and cracked the other Spectrum program, "Fantasia" and will demo these, next meeting. Speaking of which:

→ Next meeting is scheduled for August 26th (Sunday) at [redacted] - 3:00PM. We decided at the last meeting that we need to have a formal "business" portion in our meetings from now on, and an agenda for the "show and tell".

The proposed agenda for next meeting then is:

- 1) Business Meeting
 - a) Call to Order and Review of last meeting
 - b) Status of the Treasury
 - c) Review of correspondence generated by and received by the group
 - d) Plan for next meeting (timing, agenda, location)
 - e) Motions from the floor (suggestions to buy hardware/software, funding for meeting site hosts, establishment of committees, election of officers, production of a charter, etc.)
- 2) Demonstration Phase
 - a) "Fantasia" game and word Processor - Nazir P.
 - b) Quickload/Fastload/Q Save/XLR8 - which is best?
We will have power and a few TV's and TS 1000's set up.
Bring your favorite quick-loading program (I have Q-Save, for example) and we'll run Benchmark tests to see which is the most reliable, fastest, etc.
- 3) General Discussion

If you've got a new toy (hardware or software), or typed in a program from a magazine, or have "rolled your own" program for a particular need, please bring it and share it with us.

Enlarged Character Modes - 2068

The ability to print characters larger than normal size, easily and rapidly, could substantially enhance the text and graphical displays of many programs. I created the following machine code routine, and associated procedures, with this ability in mind. The routine allows printing of three enlarged character modes from BASIC...

Regular Characters

Mode 2 Characters

Mode 1 Char\$

Mode 3 Char\$

MODE	HIEGHT	X	WIDTH	MAXIMUM CHAR/LN
1	1	x	2	16
2	2	x	1	31
3	2	x	2	16

Printing these character modes from BASIC will entail creating and SAVEing a two line BASIC program (which includes machine code in a REM statement). Then, you can either MERGE it with an existing program or create a new program around it. With these two lines resident in a program you 'Print' the enlarged modes using the following procedure...

```
POKE 23728,line
POKE 23729,column
POKE 23723,mode
RANDOMIZE USA FN a()
REM "char string"
```

...Just POKE the values for the mode you desire, and the line and column at which you want printing to start, into the appropriate addresses. Then call the MC routine using the RANDOMIZE USA statement followed directly by a REM statement with

your string enclosed in quotes. You can think of this procedure as a hypothetical BASIC statement...

```
PRINT MODE n; AT ln,cl;"string"
```

Line and column values are the same as normally used but when referring to the enlarged modes you are specifying the start position for the upper, leftmost portion of the character. For instance; if line=2, column=2, mode=3, and string="XTEST"...

```
column
23456789
line 2
line 3XTEST
```

To create the routine, input the loader program below and RUN it...

```
1 REM XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2 DEF FN a()=PEEK 23635+255*P
EEK 23635+5
10 LET x=0: LET sum=0
14 ON ERR GO TO 70
20 INPUT a$
22 LET dec=VAL a$
30 POKE FN a()+x,dec
35 PRINT a$;" "
40 LET x=x+1
50 LET sum=sum+dec
60 GO TO 20
70 ON ERR RESET
75 PRINT
80 PRINT "sum=";sum
```

Enlarged Character Modes - 2068

...it is waiting for you to input the decimal code listing; do so very carefully, you would not want to do it twice.

```

0033: 178 0002: 125 0033: 175 0002: 054
0007: 040 0008: 0003: 015 040 0004: 0003: 0003:
134: 024 0002: 0003: 0003: 040 0003: 0003: 0003:
0001: 004 0000: 0000: 0000: 004 1000: 0000: 0000:
040: 000 0004: 0000: 0000: 000 0003: 177: 0000:
078: 000 0000: 0000: 0000: 000 0004: 000 0000:
033: 178 0002: 1000: 0000: 0007: 111: 0000:
000: 000 0000: 0000: 0000: 0003: 0003: 0003:
000: 018 0000: 1003: 1003: 1000: 000 0003:
170: 000 0001: 0000: 0000: 0003: 1000: 0003:
000: 000 0004: 0000: 0000: 0000: 0001: 0000:
000: 004 170 0000: 0000: 0000: 0000: 0001:
000: 061 107 0004: 144 0000: 0000: 0000:
110: 144 100 0001: 0000: 0000: 107 0000:
032: 144 111 0000: 0000: 0000: 000 0003:
037: 003 0003: 0003: 0003: 1003: 1003: 0000:
220: 000 171 0000: 1000: 0000: 0004: 0001:
040: 114 0004: 0000: 0004: 0000: 0000: 0000:
000: 170 0000: 0000: 1000: 0007: 0000: 0000:
000: 171 0000: 1000: 0004: 0003: 1000: 040:
100: 000 0000: 040 170 0000: 107 0001:
000: 001 0000: 1003: 114 0003: 115 040:
000: 170 0000: 0004: 0001: 040 0003: 0004:
000: 000 0001: 1000: 0004: 0000: 0000:
000: 000 175 0000: 0003: 070 0000: 1007:
000: 000 0001: 0004: 0007: 157 0007: 0000:
100: 024 0007: 0001: 004 000 157 0007:
000: 100 015 0000: 004 170 0000: 0007:
000: 000 170 0000: 0001: 000 170 0000:
000: 150 000 0003: 170 000 000 070 040:
170: 000 040 010 0001: 000 000 007 157:
037: 000 004 004 004 000 004 140:
001: 001 007 157 0007: 000 017 171:
000: 000 004 000 000 0001: 003 004:
170: 000 000 000 000 000 004 100 000:
024 000 004 100 000 004 003 000:
000: 000 000 000 000 000 040 010:
240: 000 004 000 000 000 000 000 000:
044: 015 040 004 000 000 171 000:
100 004 001 040 000 004 210 000:
000: 107 000 100 004 014 040 170:
000: 114 000 110 040 001 000 001:
000: 004 170 000 000 003 100 015:
030: 040 170 000 001 004 007 157:
037: 000 004 170 000 000 000 000:
034: 100 000 004 145 100 100 100:
120: 120 120

```

Sum=34865

When you've entered the last decimal code, input an "s"; the program will respond by printing a value called "sum". It should equal 34865. If it doesn't you will have to reinput the code. If you got the correct value, delete program lines 10 through 80 and SAVE the remaining lines. With line 1 and 2 still resident in the computer you are ready to experiment with the procedure I outlined earlier for generating the enlarged characters. But before you do...

You will notice that a manual or automatic attempt at LISTing the line 1 REM statement causes a spurious error report. This occurs because the MC code contains values that the system uses for color code markers. This causes annoying interference with program development and editing. Luckily we can circumvent the problem by doing the following...

1. LIST 2
2. POKE 23660,30
3. Avoid the following...
 - a. LIST
 - b. LIST 1
 - c. Moving the edit cursor onto line 1

Also, a few words of caution; I included no error trapping in the mc routine. Line and column values out of range could be disastrous, mode values other than 1-3 default printing to mode 2. Wrap around printing was not explicitly designed into the code. Mode 1 will usefully exhibit this behavior, the others will not.

WERE TO BUY IT

Here is 47th Street Photo's latest ad:

TIMEX Sinclair

TIMEX 2068 PACKAGE

72K Color Computer • 2020 Recorder •
Alphacom 3 40-column Printer • Two
extra software cassettes.

Orig. \$350
Now Only **\$179⁹⁵**

TIMEX TS-1500

16K Computer

Now Only **\$59⁹⁵**

ALPHACOM 40 column printer
(for all Timex computers) **\$49.95**

LONG
ISLAND GROUP
Sinclair
TIMEX

USERS GOING TS 2068 IN BUSINESS

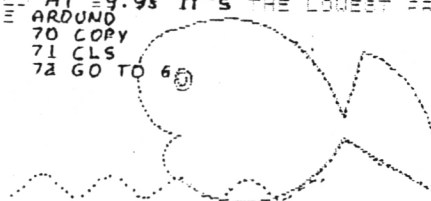
HARVEY RAIT

An example of one of many special programs which Harvey has written is shown below. Note how he has made very good use of the Draw, Plot and Circle commands.

```

22 INK 2
24 PRINT "
WHALE-OF-A-CAKE
25 PLOT 240,70
26 DRAW -40,64,.5*PI
27 DRAW -10,-30
28 DRAW -90,40,.5*PI
29 DRAW 0,-50,PI
30 DRAW 0,-20,PI
31 DRAW 90,20,.5*PI
32 DRAW 50,-24
33 CIRCLE 100,120,5
34 INK 2: CIRCLE 100,120,3
50 FOR I=-20 TO 20 STEP .5
51 PLOT I*6+127,70+5*SIN I
52 NEXT I
55 PRINT INK 2: AT 13 1;"
60 PRINT INK 2;" FIDDIE THE
PRICE AT $9.95 IT'S THE LOWEST
PRICE AROUND
WHALE-OF-A-CAKE
61 PRINT PRINT "
AT $9.95 IT'S THE LOWEST
AROUND
70 COPY
71 CLS
72 GO TO 60

```



Kevin's Fix for that little problem is the following piece of machine code. You can add the program lines shown, or just POKE the values in from immediate mode.

[illegible]

UNPLOTing on the 2068

Recently, while writing a "Drawing" program, I started to realize the limitations of character oriented color graphics. My problem was that I wanted to unplot points, but there isn't an UNPLOT command. PLOTTING over existing points with PAPER color is an alternative, but in my application the idiosyncracies of character oriented color caused unwanted effects. My only recourse was to write my own UNPLOT routine.

The product of one nights labor in machine language programming, here it is. Type in the following loader program, and RUN it...

```
POKE 23728,Y-coordinate
POKE 23729,X-coordinate
RANDOMIZE USR FN a()
```

You will notice that a manual or automatic attempt at LISTing the line 1 REM statement causes a spurious error report. This occurs because the MD code contains values that the system uses for color code markers. This causes annoying interference with program development and editing. Luckily we can circumvent the problem by doing the following...

1. LIST 2
2. POKE 2367,30
3. Avoid the following...
 - a. LIST
 - b. LIST 1
 - c. moving the edit cursor onto line 1

FIG. 1

[illegible]

0050	175	000	047	014	000	045	000
0050	045	000	053	000	053	000	000
0000	004	000	071	004	017	000	000
0000	016	000	041	000	007	071	014
0000	000	041	001	000	000	054	100
0040	000	004	054	040	000	004	000
0000	000	000	000	177	000	070	000
0000	000	000	000	057	000	001	010
0000	000	000	000	000	010	000	000
0007	000	000	000	000	071	004	014
1027	000	001	010	000	100	101	110
001							

Sum=8422

...it is waiting for you to input the decimal code list (Fig1); do so carefully. When you've entered the last decimal code, input an 'a'; the program will respond by printing a value called 'Sum'. It should be 8422, if it isn't you will have to reinput the decimal code

```

      If you got the correct value
delete program lines 10 through
80 and SAVE the rest of the
program. With the two lines of
this program MERGED into any
other you UNPLOT using the fol-
lowing procedure....

```

LONG
ISLAND GROUP
Sinclair
TIMEX

SOFTWARE/HARDWARE RECEIVED

COMPASS

Two 2068 programs on one cassette, one is an assembler, the other a compiler. The compiler was reviewed in Syntax July/84. I basically agree with that review (a nice try, but too limited). If you have HOT Z or Zeus and would like to write a comparison review of these assemblers, let us know and we'll provide you with this submission. These are from JRC (John Richard Coffey), POB 448, Scottsburry, Indiana 471070. (812)-752-6071

WINKY BOARD 2000

The Winky Board helps you load/save and copy tapes, by "conditioning" the signals to and from your computer and tape recorder. The 2000 seems to do the job, and while it won't solve all your problems, I feel no time owner should be without one. G. Russel Electronics, RD 1 Box 539, Centre Hall, Pa. 16828

EVEREST ASCENT

A strategy type word game, Everest Ascent pits your wits against Mount Everest. You must choose a team of sherpas and the right equipment and supplies necessary to reach the top. Originally not runnable, because it was a Spectrum program (all in BASIC), we have adjusted it to run on the 2058. Richard Shephard Software (UK).

VENDORS

Sunset Electronics
2254 Taraval Street
San Francisco, Ca. 94116
(415) 665-8330

One of the most complete catalogs. They have almost everything for your ZX/TS & 2068. Price is reasonable.

Zebra Systems
78-06 Jamaica Avenue
Woodhaven, N.Y. 11421
(212) 296-2385
(212) 296-2229 BBS

Zebra's line is just about as comprehensive as Sunset. Note the free Bulletin Board Service (BBS)

Secondbase
700 Lexington Avenue
Altoona, Pa. 16601
(814) 942-1871

Keyboard overlay for the TS/1000. Gives you raised keys - \$15.00.

WMJ Data Systems
4 Butterfly Drive
Hauppauge, N.Y. 11788

Household & Business software for the ZX & 2068

Microaide
1401 Oak Tree Road
Iselin, N.J. 08830
(201) 283-1910

Out of Warranty repairs (Henry Garcia)

Quick Silva Inc.
426 West Nakoma
San Antonio, Texas 78216
(512) 340-3684

Games, Games & more Games

WHAT IS LIST

LIST is a not-for profit User's Group, dedicated to the exchange of information and ideas, about Times/Sinclair computers, the expansion of computer literacy and public service to anyone interested in TS computers.

L.I.S.T. is published once/month and covers the actions of the group, programs, reviews and articles of interest to ZX/TS computer users. Membership in LIST is \$12.00/year and includes subscription to L.I.S.T.ing. Membership year is February to January. Sample copy sent upon receipt of large SASE.

Copies provided on exchange basis with other bona fide user groups.

Free copies available for pickup at 10 Idle Day Drive, while supplies last.

COPYRIGHT NOTICE

All articles published in this periodical are the property of LIST (Long Island Sinclair Times) Group. No portion of any of these articles may be reproduced in any form without the express written consent of LIST.

LATE BREAKING NEWS

- 1) Finally got in touch with Al Levy of LICA. He will come to our September meeting and give us a presentation on LICA.
- 2) COMPUTERS & ELECTRONICS - Magazine reports that Sinclair is negotiating with Samsung Electronics, South Korea, for the manufacture of ZX81's and Spectrums.

LIST IS AT:

Box 438
Centerport, N.Y. 11721

QUIRKS & QUANDARIES

Using Jeff Street's "EXPND" program turned up an interesting foible in our 2068. You may recall that the graphic character "I" on the Spectrum prints out as the keyword "STICK" in some BASIC programs (e.g., Transylvanian Tower).

However, when we put "STICK" in a REM statement for EXPND to operate upon, we get the original graphic line character. There must be different tables operating here.

L I S T

GROUP

PE